This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1(original). A temperature-sensitive thermogelling emulsion delivery system, comprising:

a biodegradable temperature-sensitive aqueous phase polymer solution;

at least one bioactive substance, and

a pharmaceutically acceptable oil phase carrier, said oil carrier embeds said bioactive substance;

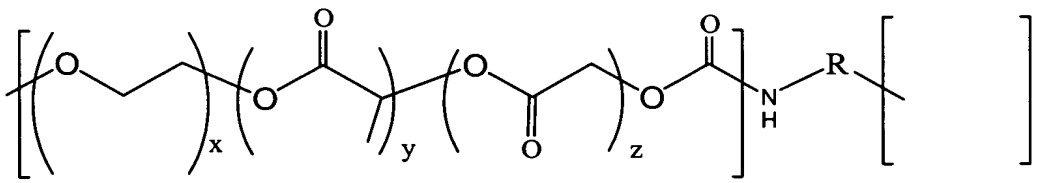
wherein

said oil phase carrier and said temperature-sensitive polymer solution are mixed mutually to form an emulsion, which is a liquid while at a temperature below a lower critical solution temperature (LCST) and transforms into a gel while the temperature of the emulsion is above said lower critical solution temperature (LCST).

2(original). The delivery system as claimed in claim 1, wherein said bioactive substance is embedded in said oil phase carrier by the means of dissolving, solid suspension or water/oil emulsification.

3(original). The delivery system as claimed in claim 1, wherein said temperature-sensitive polymer is selected from the group consisting of PEG-PLGA-PEG, PLGA-PEG-PLGA, PEG-PLGA and Poloxamor 407.

4(original). The delivery system as claimed in claim 3, wherein said PEG-PLGA-PEG is represented as formula (I):

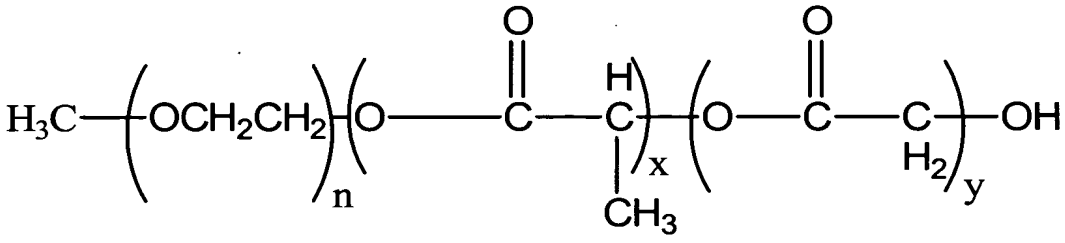


(I)

(I)

wherein x is a positive integer between 5 to 20; y is a positive integer between 20 to 40; z is a positive integer between 5 to 20; and R is the substituted linear or branched C_2 to C_{10} alkyl group.

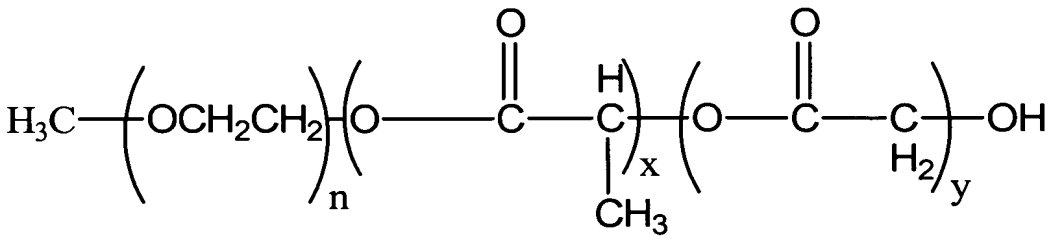
5(original). The delivery system as claimed in claim 3, wherein said PEG-PLGA is represented as formula (II):



(II)

wherein n is a positive integer between 5 to 20; x is a positive integer between 20 to 40;and y is a positive integer between 5 to 20.

6(original). The delivery system as claimed in claim 3, wherein said Poloxamer 407 is represented below:



7(original). The delivery system as claimed in claim 1, wherein said physiologically accepted oil phase carrier is a fatty acid ester.

8(currently amended). The delivery system as claimed in claim 7, wherein said physiologically accepted oil phase carrier is selected from the group consisting of lipiodol, medium chain triglyceride (MCT), soybean oil, sesame oil, castor oil, sunflower oil, mineral oil, vitamin E oil or a ~~mixtire~~ mixture of them.

9(original). The delivery system as claimed in claim 1, wherein at least one bioactive substance is selected from the group consisting of chemical compound, protein, peptide, nucleic acid, polysaccharide, carbohydrate, lipid, glycoprotein and imaging agent.

10(currently amended). The delivery system as claimed in claim 1, ~~which is used~~ in a form for subcutaneous injection, intramuscular injection, intratumor injection or embolism agent.

11(new). The delivery system as claimed in claim 1 which is a liquid while at a temperature below a lower critical solution temperature (LCST) which is from 23-27°C and transforms into a gel while the temperature of the emulsion is above 30°C.

12(new). The delivery system as claimed in claim 3 which is a sustained release drug delivery system and which is a liquid while at a temperature below a

lower critical solution temperature (LCST) which is from 23-27°C and transforms into a gel while the temperature of the emulsion is above 30°C.

13(new). The delivery system as claimed in claim 7, wherein said physiologically accepted oil phase carrier is selected from the group consisting of lipiodol, medium chain triglyceride (MCT), soybean oil, sesame oil, castor oil, sunflower oil, mineral oil, vitamin E oil or a mixture thereof and wherein at least one bioactive substance is selected from the group consisting of chemical compound, protein, peptide, nucleic acid, polysaccharide, carbohydrate, lipid, glycoprotein and imaging agent.

14(new). The delivery system as claimed in claim 12, wherein said physiologically accepted oil phase carrier is selected from the group consisting of lipiodol, medium chain triglyceride (MCT), soybean oil, sesame oil, castor oil, sunflower oil, mineral oil, vitamin E oil or a mixture thereof and wherein at least one bioactive substance is selected from the group consisting of chemical compound, protein, peptide, nucleic acid, polysaccharide, carbohydrate, lipid, glycoprotein and imaging agent.